OPEN MEETING



MEMORANDUM

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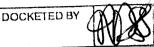
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JUN 11 2009

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TO:

FROM:

DATE:

THE COMMISSION

Utilities Division

June 11, 2009

RE:

SOUTHWEST GAS CORPORATION - APPLICATION FOR CONTINUANCE AND MODIFICATION OF ITS CONSUMER PRODUCTS PROGRAM (A DEMAND SIDE MANAGEMENT PROGRAM) (DOCKET NO. G-01551A-08-

0619)

On December 31, 2008, Southwest Gas Corporation ("Southwest" or "Company") filed to continue the existing Consumer Products program through 2011 and to modify it by expanding eligibility to additional types of high-efficiency water heaters and adding "smart" Southwest has also re-proposed programmable thermostats as a measure, contending that current, more user-friendly ENERGY STAR® programmable thermostats are more likely to produce changes in customer behavior and resultant energy savings.

Southwest originally filed an application for approval of its Consumer Products ("Consumer Products") program on June 26, 2006. On September 27, 2007, Decision No. 69916 approved the Consumer Products program as a one-year pilot offering incentives to Residential customers to install high-efficiency water heaters. Programmable thermostats and clothes washer/dryer measures were not approved for inclusion, as originally proposed, because these measures were not found to be cost-effective.

Current Program: Eligibility and Participation

To be eligible under the current program, residential customers must purchase water heaters with an Energy Factor ("EF") of 0.62 or higher. The high-efficiency appliances purchased under this program would also have to be slated for installation in a Southwest service area.

Initially, Southwest reported low participation, largely because retailers were not stocking water heaters with EF ratings that met program guidelines. As a result, the Company intensified its outreach to retailers and plumbers. Participation has now increased, and Southwest reports that there are fewer denials, meaning that fewer potential participants are applying for rebates related to ineligible water heaters. In November 2008, 36 rebates were approved and paid, while in December there were 99 rebates. With respect to 2009 only, 412 water heater rebate applications had been approved as of June 3rd, 154 were pending and only 20 had been denied. With additional water heaters eligible for incentives, and with an increase in incentives (see below), it is likely that participation will continue to improve in 2009.

Proposed Changes to the Water Heater Measure

Increased Incentives for Water Heaters

Southwest also proposes to increase the incentive for water heaters from \$75 to \$100. Southwest states that the increase would make the incentive more reflective of the higher cost of high-efficiency equipment, as compared to standard models, which it reports at \$106.

Staff recommends that a flat \$100 incentive not be approved for the water heater measure. A \$100 incentive would equal approximately 94 percent of the incremental cost of a high-efficiency water heater, meaning that there would be very little investment by participants in the higher efficiency models. An incentive limited to 50 percent or 75 percent of incremental cost would also be consistent with most other Residential Demand Side Management ("DSM") programs approved by the Commission, and would ensure that limited incentive funding goes further.

Staff recommends that Southwest be allowed to pay either a \$75 incentive, or an incentive equal to 75 percent of the incremental cost of a higher efficiency water heater, with a \$100 cap. Staff recommends a 75 percent (or \$75) incentive, rather than a 50 percent incentive, in order to encourage participation in a relatively high-cost measure in a currently challenging economic environment.

Eligibility for 29-Gallon (Mobile Home) Water Heaters

During the pilot year Southwest discovered that the 29-gallon water heaters typically used in mobile homes were not eligible for incentives under the terms of the original program. Southwest proposes to expand the program to allow incentives for these smaller high-efficiency water heaters.

Staff concurs with the Southwest proposal and recommends that 29-gallon water heaters be made eligible for incentives under the Consumer Products program guidelines. Adding to the types of high-efficiency water heaters eligible for incentives would potentially increase program participation by making more Southwest customers eligible. Adding 29-gallon water heaters would also make the program open to a broader spectrum of customers, since mobile home owners are generally less affluent than customers living in site-built homes.

Eligibility of 50- to 75-Gallon Water Heaters

In the current application, Southwest had proposed to modify program eligibility to include high-efficiency water heaters with a 50- to 75-gallon capacity, believing that these larger-capacity units were rated differently than smaller water heaters and were, for that reason, ineligible for incentives. The Company has since determined that the larger water heaters have the same type of rating and are, in fact, eligible for incentives under current program guidelines.

Staff concurs that the 50- to 75-gallon models are eligible under current program guidelines, but research indicates that larger water heaters meeting the 0.62 program standard may not be available. Federal efficiency standards for water heaters vary by size, and are lower for larger-size water heaters; energy savings can be achieved by exceeding these standards, even if the current 0.62 program standard cannot be met for the larger models. In cases where 50- to 75-gallon water heaters meeting the 0.62 standard are not available, but there is availability of models exceeding the federal efficiency standard, Staff recommends that the eligibility threshold be set at a level that is greater than the federal standard.¹

Below is a table giving examples of the federal standard for various sizes.

Federal Standards, EF Factors for Gas Water Heaters

Energy Factor Rate Storage Volume in Gallons	
29 gallons	0.61
40 gallons	0.59
60 gallons	0.57
75 gallons	0.53

Cost-Effectiveness

Staff has reviewed water heaters and determined that, under the proposed program, they remain a cost-effective program measure, with a benefit-cost ratio of 1.1. Staff recommends that the Consumer Products program be continued and that water heaters be retained as a measure. Staff also recommends that 29-gallon and 50 to 75-gallon high efficiency water heaters be eligible for incentives under the Consumer Products program.

Programmable Thermostats

Background

As stated above, at the time of the original application (June 26, 2006), programmable thermostats were not found to be cost-effective. Unlike appliances that produce savings through more efficient use of energy, programmable thermostats can only lead to energy savings if there are changes in consumer behavior. Field studies showed that these changes in behavior were not occurring in practice and that, in some instances, energy consumption increased after programmable thermostats were installed. (One explanation for the increase was that consumers who normally kept off furnaces or air conditioning while they were at work, instead used the programmable thermostats to turn on their appliances prior to arriving home.) Due to concerns over savings, and over maintaining the integrity of the Energy Star mark, as of February 2007,

¹To determine the federal standard for 50-gallon, and above, gas water heaters, Southwest should utilize the formula published in the Federal Register/Vol. 66., No. 11/Wednesday, January 17, 2001: (067 – (0.0019 x Rated Storage Volume in gallons).

² A benefit-cost ratio over 1.0 is considered cost-effective.

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the Environmental Protection Agency ("EPA") was planning to end the Energy Star designation for this measure, and that it would, instead, transition to a consumer education campaign focusing on programmable thermostats.

Research done on the current application indicates that the designation for programmable thermostats has not yet been revoked and, in response to an inquiry from Staff, Energy Star Support Staff indicated that cost-effective savings were possible, if the four pre-programmed settings on Energy Star programmable thermostats are properly used for heating and cooling. [Emphasis added.] But in a May 4, 2009 letter to thermostat manufacturers and other stakeholders, the EPA restates its intent to sunset the programmable thermostat specification as of December 31, 2009, adding that "EPA has been unable to confirm any improvement in terms of the savings delivered by programmable thermostats. . . ." EPA adds, however, that it will continue to work to develop an Energy Star specification for programmable thermostats, to develop specifications that would limit user issues that reduce energy savings, and that it would continue to educate homeowners on the energy savings available from programmable thermostats.

Staff recommends that Southwest file a report as a compliance item with Docket Control, no later than January 31, 2010, in which it informs the Commission of whether the EPA has revoked the Energy Star designation for programmable thermostats. If the Energy Star designation has been revoked for programmable thermostats, Southwest must indicate whether programmable thermostats should remain eligible for incentives under the Consumer Products program and, if so, why they should remain eligible.

Cost-Effectiveness

Staff's analysis indicates that programmable thermostats would be significantly cost-effective, if the settings are used as intended. Staff calculates the potential benefit-cost ratio for gas savings alone at 2.83³, but notes that the cost-effectiveness is reliant on consumer behavior, such as not overriding the settings too frequently, thereby reducing or eliminating any savings.

Because the savings from programmable thermostats are uncertain, but potentially substantial, Staff recommends that this measure be approved for inclusion on a pilot basis, and that Southwest verify and measure the savings arising from this measure once the Company has accumulated 12 months of data. If the savings from programmable thermostats, in practice, are insufficient to meet cost-effectiveness requirements under the Societal Cost Test, then programmable thermostats should cease to be eligible for incentives under the Consumer Products program. Staff recommends that Southwest should take no more than 60 days to evaluate the 12 months of accumulated data and that it file a report in the Docket on its findings regarding the cost-effectiveness of the programmable thermostat measure within 75 days of the end of the 12-month pilot period.

³ The Company estimates kWh savings at 304.37 for 3 degree set-up.

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"Smart" Showerheads

Background

Southwest also proposes the addition of "smart" showerheads as a measure in its Consumer Products DSM program. The "smart" showerhead is a low-flow showerhead with a water turn-off feature, designed to minimize the amount of hot water wasted during the warm-up cycle, before the user enters the shower. The "smart" feature includes a thermostatic valve that pauses a shower's water flow once the water is hot enough for bathing, when the shower may otherwise be running unattended. Once a user is ready to actually enter the shower, he or she then turns on an already-heated flow of water. This measure is designed to both conserve water and reduce energy use.

Proposed Incentive

Southwest proposes an incentive of \$30, which is equal to the incremental cost of the low flow showerhead. Staff recommends that the incentive be set at \$22.50, or 75 percent of the incremental cost of this energy efficiency measure. At 75 percent, the incentive encourages participation in a new measure, but still requires some investment by the participants.

Staff's analysis indicates that this measure is cost-effective based on the projected energy savings⁴ and participation rates, with a benefit-cost ratio of 1.05.

Because the "smart" technology is relatively new and the data on energy savings is limited, and because actual participation rates are uncertain, Staff recommends that this measure be approved for inclusion on a pilot basis. Staff also recommends that Southwest verify and measure the savings arising from "smart" showerheads once the Company has accumulated 12 months of data. If the savings from "smart" showerheads, in practice, are insufficient to meet cost-effectiveness requirements under the Societal Cost Test, then "smart" showerheads should cease to be eligible for incentives under the Consumer Products program. Staff recommends that Southwest should take no more than 60 days to evaluate the 12 months of accumulated data and that it file a report in the Docket on its findings regarding the cost-effectiveness of the "smart" showerheads measure within 75 days of the end of the 12-month pilot period.

Consumer Products Program Incentives

Table 1, below, reflects the projected participation and incentive amounts for each measure.

⁴ The application states that Sempra Energy Utilities adopted "smart" showerheads in their California energy efficiency program and estimated a savings of 6.8 therms annually, per installation, and that a City of San Diego study documented savings of 800 gallons per showerhead.

Table 1

Measure	Number of Participants	Staff Proposed Incentive Amount	Company Proposed Incentive Amount
Water Heater	1,700	\$75-\$100	\$100
Programmable			
Thermostat	3,100	\$20	\$20
"Smart"			
Showerhead	3,100	\$22.50	\$30
Total	7,900		

Consumer Products Program Proposed Budget

The projected budget for the DSM Consumer Products program is listed in Table 2, below:

Table 2

Category	2008 Actual	2009	2010	2011
Administration	\$41,538	\$52,930	\$52,930	\$52,930
Outreach	\$43,015	\$136,800	\$136,800	\$136,800
Incentives	\$35,000	\$339,570	\$339,570	\$339,570
Total	\$119,553	\$529,300	\$529,300	\$529,300

Southwest originally proposed an administrative budget of \$67,500, or 12.75 percent of the overall budget for 2009-2011. Although administrative costs can be high during the ramp-up phase of a program, Staff's position is that during most of the life of a DSM program administrative costs should be limited to 10 percent. The Company has now agreed to limit the administrative budget to \$52,930, or 10 percent of the overall budget. Rather than reducing the overall budget, Staff recommends that the \$14,570 difference be allocated to Incentives. The \$339,570 listed for incentives in the table above reflects the movement of these funds into Incentives.

Environmental Savings

The Company's projected lifetime environmental savings for the DSM Consumer Products program are listed in Table 3, below:

Table 3

Measure	Lifetime CO2 Savings (in metric tons)	Lifetime Water Savings per Program Year (in gallons)
Programmable	73,800	
Thermostats		2,511,036,270
Water Heaters	5,616	n/a
"Smart" Showerheads	3,360	24,800,000
Total	82,776	2,535,836,270

Reporting

Staff recommends that the Consumer Products program continue to be included in the semi-annual report, with the type of data for all measures that is currently included for water heaters. Southwest should also report information on the cost-effectiveness of the programmable thermostat and "smart" showerhead measures once that data becomes available.

Summary of Staff Recommendations

- Staff recommends that the Consumer Products program be continued and that water heaters be retained as a measure.
- Staff also recommends that 29-gallon and 50 to 75-gallon high efficiency water heaters be eligible for incentives under the Consumer Products program.
- In cases where 50- to 75-gallon water heaters meeting the 0.62 standard are not available, but there is availability of models exceeding the federal efficiency standard, Staff recommends that the eligibility threshold be set at a level that is greater than the federal standard based on the formula published in the Federal Register/Vol. 66., No. 11/Wednesday, January 17, 2001: (067 (0.0019 x Rated Storage Volume in gallons).
- Staff recommends that Southwest file a report, as a compliance item with Docket Control, no later than January 31, 2010, in which it informs the Commission of whether the EPA has revoked the Energy Star designation for programmable thermostats. If the Energy Star designation has been revoked for programmable thermostats, Southwest must indicate whether programmable thermostats should remain eligible for incentives under the Consumer Products program and, if so, why they should remain eligible.
- Staff recommends that programmable thermostats and "smart" showerheads be included as measures in the Consumer Products program on a pilot basis, and that Southwest verify the cost-effectiveness of these measures once it has accumulated twelve months of data; if either measure is found to be not cost-effective, that measure should cease to be eligible for incentives under the Consumer Products program.

- Staff recommends that Southwest should take no more than 60 days to evaluate the 12 months of accumulated data and that it file a report in the Docket on its findings regarding the cost-effectiveness of the programmable thermostat and "smart" showerhead measures within 75 days of the end of the 12-month pilot period.
- Staff recommends that the Consumer Products program continue to be included in the semi-annual report, with the type of data for all measures that is currently included for water heaters. The information on cost-effectiveness referred to above should also be included in the semi-annual report filed following completion of the 60-day review.
- Staff recommends that a flat \$100 incentive not be approved for the water heater measure.
- Staff recommends that Southwest be allowed to pay either a \$75 incentive, or an incentive equal to 75 percent of the incremental cost of a higher efficiency water heater, with a \$100 cap.
- Staff recommends that the incentive be set at \$22.50 for "smart" showerheads, rather than the \$30 proposed by the Company.
- Staff recommends that the administrative budget be limited to 10 percent of the overall program budget and that the \$14,570 difference between the originally proposed administrative budget and the 10 percent administrative budget be shifted to incentives.

Ernest G. Johnson

Director

Utilities Division

EGJ:JMK:lhm\CH

ORIGINATOR: Julie McNeely-Kirwan

1	BEFORE THE ARIZONA CORPORATION COMMISSION
2	KRISTIN K. MAYES
3	Chairman GARY PIERCE
4	Commissioner PAUL NEWMAN
5	Commissioner SANDRA D. KENNEDY
6	Commissioner BOB STUMP
7	Commissioner
8	IN THE MATTER OF THE APPLICATION \ DOCKET NO. G-01551A-08-0619
9	OF SOUTHWEST GAS CORPORATION DECISION NO
10	MODIFICATION OF ITS DEMAND SIDE ORDER MANAGEMENT CONSUMER PRODUCTS
11	PROGRAM
12	
13	Open Meeting
14	June 23 and 24 Phoenix, Arizona
15	BY THE COMMISSION:
16	<u>FINDINGS OF FACT</u>
17	Background
18	1. Southwest Gas Corporation ("Southwest" or "Company") is engaged in providing
19	natural gas within portions of Arizona, pursuant to authority granted by the Arizona Corporation
20	Commission.
21	2. On December 31, 2008, Southwest filed to continue the existing Consumer
22	Products program through 2011 and to modify it by expanding eligibility to additional types of
23	high-efficiency water heaters and adding "smart" showerheads. Southwest has also re-proposed
24	programmable thermostats as a measure, contending that current, more user-friendly ENERGY
25	STAR® programmable thermostats are more likely to produce changes in customer behavior and
26	resultant energy savings.
27	3. Southwest originally filed an application for approval of its Consumer Products
28	("Consumer Products") program on June 26, 2006. On September 27, 2007, Decision No. 69916

approved the Consumer Products program as a one-year pilot offering incentives to Residential customers to install high-efficiency water heaters. Programmable thermostats and clothes washer/dryer measures were not approved for inclusion, as originally proposed, because these measures were not found to be cost-effective.

Current Program: Eligibility and Participation

- 4. To be eligible under the current program, residential customers must purchase water heaters with an Energy Factor ("EF") of 0.62 or higher. The high-efficiency appliances purchased under this program would also have to be slated for installation in a Southwest service area.
- 5. Initially, Southwest reported low participation, largely because retailers were not stocking water heaters with EF ratings that met program guidelines. As a result, the Company intensified its outreach to retailers and plumbers. Participation has now increased, and Southwest reports that there are fewer denials, meaning that fewer potential participants are applying for rebates related to ineligible water heaters. In November 2008, 36 rebates were approved and paid, while in December there were 99 rebates. With respect to 2009 only, 412 water heater rebate applications had been approved as of June 3rd, 154 were pending and only 20 had been denied. With additional water heaters eligible for incentives, and with an increase in incentives (see below), it is likely that participation will continue to improve in 2009.

Proposed Changes to the Water Heater Measure

Increased Incentives for Water Heaters

- 6. Southwest also proposes to increase the incentive for water heaters from \$75 to \$100. Southwest states that the increase would make the incentive more reflective of the higher cost of high-efficiency equipment, as compared to standard models, which it reports at \$106.
- 7. Staff has recommended that a flat \$100 incentive not be approved for the water heater measure. A \$100 incentive would equal approximately 94 percent of the incremental cost of a high-efficiency water heater, meaning that there would be very little investment by participants in the higher efficiency models. An incentive limited to 50 percent or 75 percent of incremental cost would also be consistent with most other Residential Demand Side Management

("DSM") programs approved by the Commission, and would ensure that limited incentive funding goes further.

8. Staff has recommended that Southwest be allowed to pay either a \$75 incentive, or an incentive equal to 75 percent of the incremental cost of a higher efficiency water heater, with a \$100 cap. Staff has recommended a 75 percent (or \$75) incentive, rather than a 50 percent in tive, in order to encourage participation in a relatively high-cost measure in a currently challenging economic environment.

Eligibility for 29-Gallon (Mobile Home) Water Heaters

- 9. During the pilot year Southwest discovered that the 29-gallon water heaters typically used in mobile homes were not eligible for incentives under the terms of the original program. Southwest proposes to expand the program to allow incentives for these smaller higherficiency water heaters.
- 10. Staff concurs with the Southwest proposal and recommends that 29-gallon water heaters be made eligible for incentives under the Consumer Products program guidelines. Adding to the types of high-efficiency water heaters eligible for incentives would potentially increase program participation by making more Southwest customers eligible. Adding 29-gallon water heaters would also make the program open to a broader spectrum of customers, since mobile home owners are generally less affluent than customers living in site-built homes.

Eligibility of 50- to 75-Gallon Water Heaters

- 11. In the current application, Southwest had proposed to modify program eligibility to include high-efficiency water heaters with a 50- to 75-gallon capacity, believing that these larger-capacity units were rated differently than smaller water heaters and were, for that reason, ineligible for incentives. The Company has since determined that the larger water heaters have the same type of rating and are, in fact, eligible for incentives under current program guidelines.
- 12. Staff concurs that the 50- to 75-gallon models are eligible under current program guidelines, but research indicates that larger water heaters meeting the 0.62 program standard may not be available. Federal efficiency standards for water heaters vary by size, and are lower for larger-size water heaters; energy savings can be achieved by exceeding these standards, even if the

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current 0.62 program standard can not be met for the larger models. In cases where 50- to 75gallon water heaters meeting the 0.62 standard are not available, but there is availability of models exceeding the federal efficiency standard, Staff recommends that the eligibility threshold be set at a level that is greater than the federal standard.¹

Below is a table giving examples of the federal standard for various sizes. 13.

Federal Standards, EF Factors for Gas Water Heaters

Energy Factor Rate	Federal Requirement
Storage Volume in Gallons	for New Manufacture
29 gallons	0.61
40 gallons	0.59
60 gallons	0.57
75 gallons	0.53

Cost-Effectiveness

Staff has reviewed water heaters and determined that, under the proposed program, 14. they remain a cost-effective program measure, with a benefit-cost ratio of 1.1.2 recommended that the Consumer Products program be continued and that water heaters be retained as a measure. Staff also recommends that 29-gallon and 50 to 75-gallon high efficiency water heaters be eligible for incentives under the Consumer Products program.

Programmable Thermostats

Background

As stated above, at the time of the original application (June 26, 2006), 15. programmable thermostats were not found to be cost-effective. Unlike appliances that produce savings through more efficient use of energy, programmable thermostats can only lead to energy savings if there are changes in consumer behavior. Field studies showed that these changes in behavior were not occurring in practice and that, in some instances, energy consumption increased after programmable thermostats were installed. (One explanation for the increase was that consumers who normally kept off furnaces or air conditioning while they were at work, instead

To determine the federal standard for 50-gallon, and above, gas water heaters, Southwest should utilize the formula published in the Federal Register/Vol. 66., No. 11/Wednesday, January 17, 2001: (067 - (0.0019 x Rated Storage Volume in gallons).

² A benefit-cost ratio over 1.0 is considered cost-effective.

Cost-Effectiveness

used the programmable thermostats to turn on their appliances prior to arriving home.) Due to concerns over savings, and over maintaining the integrity of the Energy Star mark, as of February 2007, the Environmental Protection Agency ("EPA") was planning to end the Energy Star designation for this measure, and that it would, instead, transition to a consumer education campaign focusing on programmable thermostats.

- 16. Research done on the current application indicates that the designation for programmable thermostats has not yet been revoked and, in response to an inquiry from Staff, Energy Star Support Staff indicated that cost-effective savings were possible, if the four pre-programmed settings on Energy Star programmable thermostats are properly used for heating and cooling. [Emphasis added.] But in a May 4, 2009, letter to thermostat manufacturers and other stakeholders, the EPA restates its intent to sunset the programmable thermostat specification as of December 31, 2009, adding that "EPA has been unable to confirm any improvement in terms of the savings delivered by programmable thermostats. . . ." EPA adds, however, that it will continue to work to develop an Energy Star specification for programmable thermostats, to develop specifications that would limit user issues that reduce energy savings, and that it would continue to educate homeowners on the energy savings available from programmable thermostats.
- 17. Staff has recommended that Southwest file a report as a compliance item with Docket Control, no later than January 31, 2010, in which it informs the Commission of whether the EPA has revoked the Energy Star designation for programmable thermostats. If the Energy Star designation has been revoked for programmable thermostats, Southwest must indicate whether programmable thermostats should remain eligible for incentives under the Consumer Products program and, if so, why they should remain eligible.

18. Staff's analysis indicates that programmable thermostats would be significantly cost-effective, if the settings are used as intended. Staff calculates the potential benefit-cost ratio

st-effective, if the settings are used as intended. Staff calculates the potential benefit-cost

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for gas savings alone at 2.83³, but notes that the cost-effectiveness is reliant on consumer behavior, such as not overriding the settings too frequently, thereby reducing or eliminating any savings.

19. Because the savings from programmable thermostats are uncertain, but potentially substantial, Staff has recommended that this measure be approved for inclusion on a pilot basis, and that Southwest verify and measure the savings arising from this measure once the Company has accumulated 12 months of data. If the savings from programmable thermostats, in practice, are insufficient to meet cost-effectiveness requirements under the Societal Cost Test, then programmable thermostats should cease to be eligible for incentives under the Consumer Products program. Staff has recommended that Southwest should take no more than 60 days to evaluate the 12 months of accumulated data and that it file a report in the Docket on its findings regarding the cost-effectiveness of the programmable thermostat measure within 75 days of the end of the 12-month pilot period.

"Smart" Showerheads

Background

20. Southwest also proposes the addition of "smart" showerheads as a measure in its Consumer Products DSM program. The "smart" showerhead is a low-flow showerhead with a water turn-off feature, designed to minimize the amount of hot water wasted during the warm-up cycle, before the user enters the shower. The "smart" feature includes a thermostatic valve that pauses a shower's water flow once the water is hot enough for bathing, when the shower may otherwise be running unattended. Once a user is ready to actually enter the shower, he or she then turns on an already-heated flow of water. This measure is designed to both conserve water and reduce energy use.

Proposed Incentive

21. Southwest proposes an incentive of \$30, which is equal to the incremental cost of the low flow showerhead. Staff has recommended that the incentive be set at \$22.50, or 75 percent

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³ The Company estimates kWh savings at 304.37 for 3 degree set-up.

of the incremental cost of this energy efficiency measure. At 75 percent, the incentive encourages participation in a new measure, but still requires some investment by the participants.

- 22. Staff's analysis indicates that this measure is cost-effective based on the projected energy savings⁴ and participation rates, with a benefit-cost ratio of 1.05.
- 23. Because the "smart" technology is relatively new and the data on energy savings is limited, and because actual participation rates are uncertain, Staff has recommended that this measure be approved for inclusion on a pilot basis. Staff also recommends that Southwest verify and measure the savings arising from "smart" showerheads once the Company has accumulated 12 months of data. If the savings from "smart" showerheads, in practice, are insufficient to meet cost-effectiveness requirements under the Societal Cost Test, then "smart" showerheads should cease to be eligible for incentives under the Consumer Products program. Staff has recommended that Southwest should take no more than 60 days to evaluate the 12 months of accumulated data and that it file a report in the Docket on its findings regarding the cost-effectiveness of the "smart" showerheads measure within 75 days of the end of the 12-month pilot period.

Consumer Products Program Incentives

Table 1, below, reflects the projected participation and incentive amounts for each measure.

Table 1

Measure	Number of Participants	Staff Proposed Incentive Amount	Company Proposed Incentive Amount
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Total	7,900		

⁴ The application states that Sempra Energy Utilities adopted "smart" showerheads in their California energy efficiency program and estimated a savings of 6.8 therms annually, per installation, and that a City of San Diego study documented savings of 800 gallons per showerhead.

Consumer Products Program Proposed Budget

25. The projected budget for the DSM Consumer Products program is listed in Table 2, below:

Table 2

Category	2008 Actual	2009	2010	2011
Administration	\$41,538	\$52,930	\$52,930	\$52,930
Outreach	\$43,015	\$136,800	\$136,800	\$136,800
Incentives	\$35,000	\$339,570	\$339,570	\$339,570
Total	\$119,553	\$529,300	\$529,300	\$529,300

26. Southwest originally proposed an administrative budget of \$67,500, or 12.75 percent of the overall budget for 2009-2011. Although administrative costs can be high during the ramp-up phase of a program, Staff's position is that during most of the life of a DSM program administrative costs should be limited to 10 percent. The Company has now agreed to limit the administrative budget to \$52,930, or 10 percent of the overall budget. Rather than reducing the overall budget, Staff has recommended that the \$14,570 difference be allocated to Incentives. The \$339,570 listed for incentives in the table above reflects the movement of these funds into Incentives.

Environmental Savings

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Table 3

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	metric tons)	Program Year (in gallons)
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Total	82,776	2,535,836,270

Reporting

27. Staff has recommended that the Consumer Products program continue to be included in the semi-annual report, with the type of data for all measures that is currently included

De	cision	Nο

for water heaters. Southwest should also report information on the cost-effectiveness of the programmable thermostat and "smart" showerhead measures once that data becomes available.

3 Summary of Staff Recommendations

they should remain eligible.

• Staff has recommended that the Consumer Products program be continued and that water heaters be retained as a measure.

• Staff also recommends that 29-gallon and 50 to 75-gallon high efficiency water heaters be eligible for incentives under the Consumer Products program.

• In cases where 50- to 75-gallon water heaters meeting the 0.62 standard are not available, but there is availability of models exceeding the federal efficiency standard, Staff has recommended that the eligibility threshold be set at a level that is greater than the federal standard based on the formula published in the Federal Register/Vol. 66., No. 11/Wednesday, January 17, 2001: (067 – (0.0019 x Rated Storage Volume in gallons).

Staff has recommended that Southwest file a report as a compliance item with Docket Control, no later than January 31, 2010, in which it informs the Commission of whether the EPA has revoked the Energy Star designation for programmable thermostats. If the Energy Star designation has been revoked for programmable thermostats, Southwest must indicate whether programmable thermostats should remain eligible for incentives under the Consumer Products program and, if so, why

- Staff has recommended that programmable thermostats and "smart" showerheads be included as measures in the Consumer Products program on a pilot basis, and that Southwest verify the cost-effectiveness of these measures once it has accumulated twelve months of data; if either measure is found to be not cost-effective, that measure should cease to be eligible for incentives under the Consumer Products program.
- Staff has recommended that Southwest should take no more than 60 days to evaluate the 12 months of accumulated data and that it file a report in the Docket on its findings regarding the cost-effectiveness of the programmable thermostat and "smart" showerhead measures within 75 days of the end of the 12-month pilot period for each measure.
- Staff has recommended that the Consumer Products program continue to be included in the semi-annual report, with the type of data for all measures that is currently included for water heaters. The information on cost-effectiveness referred to above should also be included in the semi-annual report filed following completion of the 60-day review.
- Staff has recommended that a flat \$100 incentive not be approved for the water heater measure.

Decision No.

- Staff has recommended that Southwest be allowed to pay either a \$75 incentive, or an incentive equal to 75 percent of the incremental cost of a higher efficiency water heater, with a \$100 cap.
- Staff has recommended that the incentive be set at \$22.50 for "smart" showerheads, rather than the \$30 proposed by the Company.
- Staff has recommended that the administrative budget be limited to 10 percent of the overall program budget and that the \$14,570 difference between the originally proposed administrative budget and the 10 percent administrative budget be shifted to incentives.

CONCLUSIONS OF LAW

- 1. Southwest is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.
- 2. The Commission has jurisdiction over Southwest and over the subject matter of the application.
- 3. The Commission, having reviewed the application and Staff's Memorandum dated June 11, 2009, concludes that it is in the public interest to approve the Continuation and Modification of the Consumer Products program.

ORDER

IT IS THEREFORE ORDERED that the Consumer Products program be continued and that water heaters be retained as a measure.

IT IS FURTHER ORDERED that 29-gallon and 50 to 75-gallon high efficiency water heaters be eligible for incentives under the Consumer Products program.

IT IS FURTHER ORDERED that, in cases where 50- to 75-gallon water heaters meeting the 0.62 standard are not available, but there is availability of models exceeding the federal efficiency standard, the eligibility threshold be set at a level that is greater than the federal standard based on the formula published in the Federal Register/Vol. 66., No. 11/Wednesday, January 17, 2001: (067 – (0.0019 x Rated Storage Volume in gallons).

IT IS FURTHER ORDERED that, Southwest file a report as a compliance item with Docket Control, no later than January 31, 2010, in which it informs the Commission of whether the EPA has revoked the Energy Star designation for programmable thermostats. If the Energy

Star designation has been revoked for programmable thermostats, Southwest must indicate whether programmable thermostats should remain eligible for incentives under the Consumer Products program and, if so, why they should remain eligible.

IT IS FURTHER ORDERED recommends that programmable thermostats and "smart" showerheads be included as measures in the Consumer Products program on a pilot basis, and that Southwest verify the cost-effectiveness of these measures once it has accumulated twelve months of data; if either measure is found to be not cost-effective, that measure should cease to be eligible for incentives under the Consumer Products program.

IT IS FURTHER ORDERED that Southwest should take no more than 60 days to evaluate the 12 months of accumulated data and that it file a report in the Docket on its findings regarding the cost-effectiveness of the programmable thermostat and "smart" showerhead measures within 75 days of the end of the 12-month pilot period.

IT IS FURTHER ORDERED that the Consumer Products program continue to be included in the semi-annual report, with the type of data for all measures that is currently included for water heaters. The information on cost-effectiveness referred to above should also be included in the semi-annual.

IT IS FURTHER ORDERED that a flat \$100 incentive not be approved for the water heater measure.

IT IS FURTHER ORDERED that Southwest be allowed to pay either a \$75 incentive, or an incentive equal to 75 percent of the incremental cost of a higher efficiency water heater, with a \$100 cap.

IT IS FURTHER ORDERED that the incentive be set at \$22.50 for "smart" showerheads, rather than the \$30 proposed by the Company.

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COMMISSIONER

Decision No.

IT IS FURTHER ORDERED that the administrative budget be limited to 10 percent of the 1 overall program budget and that the \$14,570 difference between the originally proposed 2 administrative budget and the 10 percent administrative budget be shifted to incentives. 3 IT IS FURTHER ORDERED that this Decision shall become effective immediately. 4 5 BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION 6 7 8 **COMMISSIONER CHAIRMAN** 9 10 11 COMMISSIONER COMMISSIONER 12 IN WITNESS WHEREOF, I, Michael P. Kearns, Interim 13 Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of 14 this Commission to be affixed at the Capitol, in the City of Phoenix, this _____, 2009. 15 16 17 MICHAEL P. KEARNS 18 INTERIM EXECUTIVE DIRECTOR 19 20 DISSENT: _____ 21 DISSENT: 22 23 EGJ:JMK:lhm\CH 24 25 26 27 28

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